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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/691,416

10/22/2003

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PWK-02-1-D

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02/25/2009

EXAMINER

SPEER, TIMOTHY M

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

02/25/2009

PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PATRICK W. KELLEY

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Appeal 2008-4931  
Application 10/691,416  
Technology Center 1700

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Decided:<sup>1</sup> February 25, 2009

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Before CHUNG K. PAK, TERRY J. OWENS, and PETER F. KRATZ,  
*Administrative Patent Judges.*

KRATZ, *Administrative Patent Judge.*

DECISION ON APPEAL

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

This is a decision on an appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 1 and 4-13. We have jurisdiction pursuant to 35 U.S.C. § 6.

#### STATEMENT OF THE CASE

Appellant's claimed invention is directed to a plastic log comprising at least 80 percent thermoplastic materials including at least one polyolefin selected from polyethylene and/or polypropylene. The log is characterized by a length greater than two inches, a specified flexural modulus, and a specified diameter deviation. The Specification discloses that Appellant's logs can contain recycled plastic and that they are useful for fencing applications (Spec. 2). Claims 1 and 5 are illustrative and reproduced below:

1. A plastic log having an average diameter greater than 2 inches, a flexural modulus at 40°F of at least 70,000 psi and a diameter deviation in the range of 2 to 60% wherein said log comprises at least 80% thermoplastic materials comprising at least one polyolefin selected from the group consisting of polyethylene and polypropylene.

5. A plastic log having deviations in diameter simulating a natural wood log comprising at least 80% polypropylene and having an average diameter greater than 2 inches, a flexural modulus at 40°F of at least 90,000 psi and a diameter deviation defined by the algorithm  $((D-d)/D) \times 100$  in the range of 2 to 60%, where D is the maximum diameter and d is the minimum diameter.

The Examiner relies on the following prior art references as evidence in rejecting the appealed claims:

Bonnema	US 4,913,473	Apr. 3, 1990
Christian	US 5,253,458	Oct. 19, 1993
Erwin	US 5,728,330	Mar. 17, 1998

The Appellant furnishes an exhibit said to comprise “a communication to the USPTO of October 15, 2005 which includes a table showing the mechanical properties of vinyl polymer (PVC)” (App. Br. 10; Evidence Appendix).<sup>2</sup>

The Examiner maintains the following grounds of rejection:

I. Claims 1 and 4-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Christian in view of Bonnema;

II. Claims 1 and 4-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Christian in view of Erwin; and

III. Claims 1 and 4-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Erwin.

We affirm the stated rejections for reasons set forth in the Examiner’s Answer and as further explained below.

Appellant does not present reasonably specific and distinct arguments for the separate patentability of the individual appealed claims. In this regard, we note that the provision of a brief description as to what an individual claim may recite is not a separate argument. Thus, we select claim 1 as the representative claim on which we shall primarily focus in deciding this appeal as to each of the stated rejections.

Appellant presents several arguments in the Appeal Brief in opposition to the Examiner’s obviousness rejections, which arguments are capsulated below.

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<sup>2</sup> PTO records show that two data sheets corresponding to Exhibit 1 were submitted on October 15, 2004.

Concerning the Examiner's first stated obviousness rejection over Christian in view of Bonnema, Appellant maintains that the plastic material requirements of the claimed plastic log for post and rail fencing, including flexural modulus, diameter, diameter deviation, and the polyolefin material requirement, are not taught by either of the applied references and would not have been suggested to one of ordinary skill in the art by their combination given that Christian relates to foam filled plastic logs used for constructing a log home whereas Bonnema is directed to the formation of a corrugated plastic pipe (App. Br. 4-9).

Regarding the Examiner's second stated obviousness rejection over Christian in combination with Erwin, Appellant notes that Christian (U.S. Patent No. 5,253,458) is referenced at column 1, line 30 of Erwin and argues, in essence, that the applied prior art references, alone or in combination, do not teach or suggest plastic logs as required by appealed claims 1 or 5; that is, logs that are characterized by Appellant's claimed diameter deviation and/or 80 percent polyolefin requirement (App. Br. 9 and 10).

As to the third-stated obviousness rejection over Erwin, Appellant contends that Erwin is concerned with "foam-filled extruded product" like the filled plastic pipe of Christian (App. Br. 10). In this regard, Appellant conclusively argues that Erwin advances no teaching or suggestion about the properties of plastic logs that would have brought one of ordinary skill in the relevant art to arrive at the claimed subject matter. *Id.*

## ISSUES

Has Appellant established reversible error in any or all of the Examiner's separate obviousness rejections based on the aforementioned arguments, as more fully set forth in the Appeal Brief?

## SUMMARY DISPOSITION

We answer this question in the negative as to each of the Examiner's separate obviousness rejections.

## PRINCIPLES OF LAW

On appeal to this Board, Appellants must show that the Examiner erred in finally rejecting the claims. *Cf. In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006); *see also* 37 C.F.R. § 41.37(c)(1)(vii).

During examination, claims terms must be given "their broadest reasonable construction consistent with the specification." *In re Icon Health and Fitness, Inc.*, 496 F.3d 1374, 1378-79 (Fed. Cir. 2007). In proceedings before the PTO, such a broadest reasonable interpretation of the claims in an application involves reading the claim language in light of the Specification as it would be interpreted by one of ordinary skill in the art. *See In re Sneed*, 710 F.2d 1544, 1548 (Fed. Cir. 1983). However, limitations are not to be read into the claims from the Specification. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) citing *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989).

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art; (2) the

differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) any secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). “[A]nalysis [of whether the subject matter of a claim is obvious] need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l Co. Teleflex, Inc.*, 127 S. Ct. 1727, 1741 (2007). *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“[T]he absence of specific findings on the level of skill in the art does not give rise to reversible error ‘where the prior art itself reflects an appropriate level and [the] need for testimony is not shown’”).

The analysis supporting obviousness should be made explicit and should “identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements” in the manner claimed. *KSR*, 127 S. Ct. at 1741. However, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 127 S. Ct. at 1739.

“A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his problem.” *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992). In other words, “familiar items may have obvious uses beyond their primary purposes.” *KSR*, 127 S. Ct. at 1742 (2007).

In considering the question of the obviousness of the claimed invention in view of the prior art relied upon, we are guided by the basic

principle that the question under 35 U.S.C. § 103 is not merely what the references expressly teach but what they would have suggested to one of ordinary skill in the art at the time the invention was made. *See Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989) and *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). That is, the question of obviousness cannot be approached on the basis that an artisan having ordinary skill would have known only what they read in the references, because such artisan is presumed to know something about the art apart from what the references disclose. *See In re Jacoby*, 309 F.2d 513, 516 (CCPA 1962).

Nor is it necessary that suggestion or motivation be found within the four corners of the references themselves. “The obviousness analysis cannot be confined by the formalistic conception of the words teaching, suggestion and motivation, or by overemphasis on the importance of . . . the explicit content of issued patents.” *KSR*, 127 S. Ct. at 1741. Indeed, a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. *See In re Bozek*, 416 F.2d 1385, 1390 (CCPA 1969). After all, it is well settled that “[t]he person of ordinary skill in the art is a hypothetical person who is presumed to know the relevant prior art.” *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986).

It is axiomatic that admitted prior art in an Applicant's Specification may be used in determining the patentability of a claimed invention and that consideration of the prior art cited by the Examiner may include



consideration of the admitted prior art found in an Applicant's Specification. *In re Nomiya*, 509 F.2d 566, 570-571 (CCPA 1975); *In re Davis*, 305 F.2d 501, 503 (CCPA 1962); *In re Hedges*, 783 F.2d 1038, 1039-1040 (Fed. Cir. 1986).

### FINDINGS OF FACT

In addition to findings of fact set forth elsewhere in this Decision, we determine the following relevant findings of fact by a preponderance of the evidence standard:

The subject Specification defines a preferred embodiment “log” as “a nominally cylindrical, extruded shape which can be cut into useful lengths” (Spec. 3).

The aforementioned Specification definition for “log” does not state a requirement for a hollow or solid log shape, and/or require the log to be a monolithic structure. *Id.*

The Specification discloses that preferred embodiments of Appellant’s asserted inventive plastic log is characterized by a suitable size for fence applications (average diameter greater than 2 inches), a flexural modulus of at least 70,000 pounds per square inch (psi), such as 100,000 psi, and a diameter deviation (2%-60%) that yields a log-like appearance (Spec. 2-3). The Specification discloses that Appellant’s plastic log can be made from recycled thermoplastic material, including polyethylene or polypropylene (Spec. 2 and 4). Further, the subject Specification notes that the inventive log, that is, a log having the aforementioned characteristics, could

substantially comprise other plastic materials such as ABS, polycarbonates, other styrenic polymers, acrylics, nylon, and PET (Spec. 2).

Appellant's Specification references U.S. Patent No. 5, 916, 932 and acknowledges that it is known to form a molded product from recycled plastic, which plastic product can be employed, for example, in railroad tie applications (Spec. 1). The acknowledged prior art recycled plastic source, useful for building material fabrication, includes high density polyethylene (HDPE) and polypropylene. *Id.*

Furthermore, Appellant acknowledges that "[p]lastic products for fencing and lumber are common real world architectural products . . . " (App. Br. 1).

Also, Appellant acknowledges that "[i]t is true that pipe can be used for fencing . . ." (App. Br. 6).

Christian discloses or suggests a simulated construction log having the appearance of a real log can be formed from plastic tubing as in the prior art, or the simulated log may be formed from pre-cast polyvinyl chloride (PVC) plastic pipe that is filled with foam in accordance with the Christian disclosure (col. 1, ll. 18-49; col. 3, ll. 31-38). Christian states that the plastic simulated log product comprises "knots, cracks, and wood grain" (col. 1, ll. 50-51).

The Examiner has reasonably found that introducing surface imperfections into a log (pipe), such as the knots, cracks, and wood grain as taught by Christian, would have suggested a diameter deviation within the range claimed (2 -60 percent) for the log of Christian (Ans. 3-4).

Bonnema discloses a double-wall molded plastic pipe that preferably can be formed from “high density polyethylene, PVC, or polypropylene” (col. 4, ll. 41-61).

Erwin discloses or suggests that plastic products are a substitute for wood for use in construction and that such substitution can reduce the rate of tree harvesting; thereby, conserving and protecting this renewable woodland resource (col. 1, ll. 13-19). Erwin discloses or suggests a wood substitute comprising a plastic product that includes an extruded outer thermoplastic shell and a foam core, such as polyurethane foam, of a predetermined shape and size (Abstract; col. 1, l. 45 - col. 2, l. 5; col. 4, l. 54). Erwin discloses that the plastic product shell can be “preferably made from polyvinylchloride, but other materials such as acrylic, ABS, polyethylene, polypropylene, polycarbonate, and blends and alloys of two or more of these materials can be used” (col. 4, ll. 56-59).

Erwin discloses that the extruded plastic product can be cut into sizes of a predetermined length (col. 4, ll. 26-29).

The Examiner has reasonably found that: (1) the aforementioned disclosure of Erwin would have suggested a plastic extruded product made with polyethylene, polypropylene, or mixtures including these materials as disclosed therein; and (2) based on these materials of formation, the Erwin product would have been reasonably expected to possess a flexural modulus corresponding to Appellant’s claimed flexural modulus (Ans. 5-6).

Appellant acknowledges that polyethylene and polypropylene are material choices identified by Erwin for the shell of Erwin’s plastic product (App. Br. 10-11).

Appellant states that “. . . PVC has a flexural modulus of 10,000 psi . . . ”; that is, the flexural modulus can be measured as a polymer property in accordance with ASTM D790 (App. Br. 7; Evidence Appendix, Exhibit I). Appellant further states that “. . . polyolefins are characterized by unique physical properties of strength, durability and flexural modulus, e.g., at least 70,000 psi at 40°F, a characteristic that makes them uniquely suitable for plastic logs intended for real world post and rail fencing . . .” (App. Br. 9). In a description of the preferred embodiments of their invention, Appellant also instructs that “flexural modulus” can be determined via center span load testing a product of a predetermined length of log having an average radius using a given formula (Spec. 3 and 7).

Erwin refers to U.S. Patent No. 5,523,458 (Christian) in the background of the Invention section thereof (col. 1, ll. 31-37).

## ANALYSIS AND CONCLUSIONS

### Claim Construction

Based on our findings above and giving representative claim 1 its broadest reasonable construction consistent with the Specification, we determine that the plastic log product called for in claim 1 includes a hollow or solid log form that may or may not be monolithic in construction. The log is required to be of a form possessing an average diameter greater than two inches and having a diameter variation of from two to 60 percent along a length thereof. The log includes 80 percent thermoplastic material, which thermoplastic material component includes at least one polyethylene or polypropylene as a part thereof. Representative claim 1 does not require or preclude the provision of a filling material as being part of the log.

Representative claim 1 further requires a log characterized by a flexural modulus of at least 70,000 psi at 40 °F. The flexural modulus determination according to the provided formula in the Specification preferred embodiments Section is not limited to any particular load (W) being applied to any particular length of log center span to any particular span length (L) of the log (Spec. 3). In this regard, we note that Appellant references Exhibit I (copy supplied in the Appendix to the Appeal Brief) as showing the Flexural Modulus for a particular polyvinyl chloride (PVC) polymer (POLYONE GEON® 87350) as being a property of the polymer, not a property of a particular log structure made with the polymer (App. Br. 7; Evidence Appendix, Exhibit 1). The Flexural Modulus for the PVC polymer was reported as 10 ksi (10,000 psi) when the material was tested in accordance with ASTM D790. However, Appellant has not provided that the flexural modulus log testing technique furnished by Appellant in the Specification, much less the flexural modulus of representative claim 1, is restricted to a modulus measured by an ASTM D790 standard material testing technique for a given material.

In other words and in giving representative claim 1 its broadest reasonable construction, we determine that one of ordinary skill in the art would construe representative claim 1 as requiring the recited flexural modulus property for a plastic material used as a component of the log as per ASTM D790 or, in the alternative, as requiring the recited flexural modulus property for a log that is otherwise within the scope of representative claim 1 when measured based on Applicant's Specification preferred embodiment formula for anyone of all the possible load values (W) that could be applied

to any center span section length of the log when the log is supported in any manner so as to furnish a span length (L) of any value for the log testing in accordance with the Specification flexural modulus formula (App. Br. 7 and 9; Evidence Appendix, Exhibit I; Spec. 3 and 7).

Representative claim 1 is drawn to a plastic log and is not limited to a particular use of a plastic log, including use as any element of a fence.

#### REJECTIONS I AND II

Concerning the first and second obviousness rejections, the Examiner acknowledges that Christian does not expressly disclose using thermoplastic material, such as polyethylene and/or polypropylene in making a plastic log as a full or partial replacement for the PVC described by Christian (Ans. 3-4). However, in light of the additional teachings of either Bonnema or Erwin with respect to the art recognized availability of these thermoplastic polyolefins for use in making substantially rigid pipe/log shaped structures, the Examiner has reasonably found that it would have been obvious to one of ordinary skill in the art to employ these known engineering plastics as alternatives to the PVC of Christian and, with the exercise of routine skill in so doing, arrive at a pipe (log) structure having the claimed flexural modulus property, diameter, diameter deviation, and polymer content requirements as broadly required by representative claim 1 (Ans. 3-9).

Appellant has not particularly identified in any reversible error in the Examiner's first and second stated obviousness rejections of the appealed claims based on the arguments set forth in the Appeal Brief.

Concerning the obviousness rejection over Christian in view of Bonnema, we, of course, agree with Appellant that Bonnema is not directed

to making a simulated wood log out of plastic material, like Christian. However, Appellant's arguments to the effect that Bonnema represents non-analogous art and/or is so remote from the subject matter of Christian so as to not be suggestive to one of ordinary skill in the relevant art of the Examiner's proposed modification of Christian based on the teachings of Bonnema are not persuasive. After all, the Examiner is principally relying on Christian for showing that polyethylene and polypropylene are known thermoplastic materials that can be employed in making a shaped structure having some rigidity such as a pipe (log) structure, which is the type of shaped structure desired by Christian. Indeed, Appellant's have acknowledged that such polyolefin plastic materials are readily available and usable in making simulated wood products from plastic as set forth above and in the subject Specification and Appeal Brief (Spec. 2; App. Br. 1). We note again that representative claim 1 is not drawn to a fence or component of a fence. Consequently, the plethora of arguments respecting such a utility for the representative claim 1 log are off the mark and unpersuasive as directed to a non-issue with respect to the claimed subject matter before us.

As for the claimed log diameter greater than two inches, we agree with the Examiner that Christian would have reasonably suggested such a diameter for a log product for reasons set forth in the Answer (Ans. 6). Similarly and with regard to the diameter deviation limitation of representative claim 1, we agree with the Examiner that Appellant has not proffered a fairly reasoned rebuttal to the Examiner's determination that such a diameter deviation provision in a simulated log made from plastic would have been readily within the purview of an ordinarily skilled artisan

in seeking a plastic simulated log product that looks real, as sought by Christian (App. Br. 6; Ans. 7; Christian, col. 1, ll. 29-31).

In this regard, we note that the claimed diameter and diameter deviation required by representative claim 1 does not require more than one deviation location along any portion of a length of a greater than two inch diameter log, including one or more of its ends, for the small diameter deviation required. As Christian is concerned with making logs for construction purposes, one of ordinary skill in the art would have recognized that these plastic products can be made, shaped, or cut into different sizes and shapes for such a purpose (Christian; col. 4, ll. 34-42).

We again note that Appellant has acknowledged that a pipe or log shape can be used as a fence construction element. Moreover, Appellant has acknowledged that the claimed flexural modulus relates to the materials of construction (App. Br. 9). Against this backdrop and absent a substantiated rebuttal of the Examiner's reasonable position that the claimed flexural modulus would be expected to result upon substitution of polyethylene and/or polypropylene for the PVC of Christian, as suggested by either of Erwin or Bonnema, we find no error in the Examiner's obviousness assessment of the claimed subject matter on this record premised on the arguments made in the Appeal Brief. This is particularly so in light of the prior art admissions in the Specification.,

Further concerning the Examiner's second presented obviousness rejection, we observe that the Examiner has rejected all of the appealed claims as being obvious, within the meaning of 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of Christian and Erwin.



Consequently, it follows from our disposition as to the Examiner's obviousness rejection over Erwin alone, as set forth below, together with our findings of fact and analysis with respect thereto, that we shall also affirm the Examiner's second stated rejection on the basis that the Examiner has furnished adequate evidence based on Erwin's teachings to render the subject matter of representative claim 1 at least prima facie obvious based on Erwin in combination with Christian.

Indeed, Erwin references Christian, as we note in our findings of fact above. Notwithstanding Appellant's argument to the contrary, Erwin does add to the teachings of Christian in a significant way with respect to the representative claim 1 requirement for a plastic log made with polyethylene or polypropylene, as alternate plastic materials to be used in place of or together with PVC in forming a plastic log as a wood substitute for construction purposes. Concerning Appellant's argument that Erwin would not have suggested employing at least 80 percent polyolefin in an extruded product and diameter deviations as set forth in claim 1 (App. Br. 10), we note that representative claim 1 requires a log comprising 80 percent thermoplastic materials, not 80 percent polyolefin. In this regard, we note that Appellant has not persuasively argued, much less established, that the foam that may be employed as a filling or core section of the pipe or log of Christian or Erwin would have been a non-thermoplastic foam, of necessity. After all, the foam filling or core, if or when used, would either be characterized as thermoplastic or thermosetting, in characteristic.

Aside from Christian stating that their plastic simulated log product comprises "knots, cracks, and wood grain" (col. 1, ll. 50-51), Erwin evinces

an extrusion process for making a plastic log having a predetermined shape and size for use as a wood substitute (Abstract; col. 1, l. 63-col. 2, l. 5).

Consequently, arguments with respect to these alleged patentable distinctions are not persuasive of error in the Examiner's obviousness rejection of representative claim 1 over the combined teachings of Christian and Bonnema, or Christian and Erwin.

### REJECTION III

As we found above, Erwin discloses or suggests a plastic product substitute for wood comprising an extruded thermoplastic "log" of a predetermined size and shape that can comprise a polyethylene or polypropylene shell and a polyurethane foam material filling. The Examiner has basically determined that one of ordinary skill in the art would have recognized that Erwin suggests that thermoplastic logs can be fabricated from polypropylene and/or polyethylene containing materials for at least a shell portion thereof with a filling, such as polyurethane foam (thermoplastic or thermosetting), as a core. In other words, the Examiner determined that Erwin's disclosure would have reasonably suggested a thermoplastic log of an average diameter and shape and having appropriate materials and hence physical properties for a wood substitute, including properties as required by representative claim 1. This would have been readily understood by one of ordinary skill in the art of making plastic-containing wood substitutes. After all, a person of ordinary skill in this art would have been expected to be familiar with the known properties of commercially available polyethylene and polypropylene polyolefins, including their flexural modulus characteristics and the characteristic needed for a given wood-substitute

product that may be used for a particular application, such as for a fencing material or other construction purpose.

Against this backdrop, Appellant's unsubstantiated and generalized arguments that "Erwin does not teach any of the characteristics of plastic logs" and that "[t]here is simply no teaching or suggestion in Erwin to lead a person of ordinary skill in the art to the claimed subject matter" are not persuasive of reversible error in the Examiner's obviousness rejection over Erwin. (App. Br. 9-10). This is so given the prior art acknowledgements of Appellant in the Specification and the level of skill available as evinced by Appellant's Specification and the applied reference. Indeed, Appellant acknowledges that Erwin discloses using thermoplastic polymers, including polyethylene and polypropylene, as material sources for forming a shell portion of Erwin's wood-substitute "log" product structure (App. Br. 9-10). Appellant has not furnished any persuasive evidence to buttress the argument that Erwin would not have suggested a plastic log possessing the representative claim 1 product characteristics to one of ordinary skill in the art as a wood-substitute.

In sum, Appellant's argument against the Examiner's rejection is undercut when Erwin is considered in light of Appellant's admissions in the Specification, which reasonably suggests that the hypothetically ordinarily skilled artisan knows that shaped composites can be made from plastic tailings comprising high amounts of polyethylene as a substitute for wood building materials. In particular, this admitted knowledge and disclosure evinces, at least inferentially, that one of ordinary skill in the art at the time of the invention had a skill level and knowledge informed with respect to

thermoplastic materials and their properties and their shaping techniques for fashioning wood-substitute construction materials (logs) of a desired dimension and structural strength from such plastics. This skill level and knowledge is such that the claimed subject matter would have been within the ready reach of such an ordinarily skilled artisan in making thermoplastic logs, of the type claimed, for use as wood substitutes.

On this record, we are not persuaded of reversible error in the Examiner's obviousness rejection of the appealed claims over Erwin based on Appellant's arguments set forth in the Appeal Brief.

#### CONCLUSION

Appellant has not established reversible error in any or all of the Examiner's separate obviousness rejections based on the aforementioned arguments, as more fully set forth in the Appeal Brief.

#### ORDER

The decision of the Examiner to reject claims 1 and 4-13 under 35 U.S.C. § 103(a) as being unpatentable over Christian in view of Bonnema; to reject claims 1 and 4-13 under 35 U.S.C. § 103(a) as being unpatentable over Christian in view of Erwin; and to reject claims 1 and 4-13 under 35 U.S.C. § 103(a) as being unpatentable over Erwin is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

#### AFFIRMED

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Appeal 2008-4931  
Application 10/691,416

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